

II. CLAIM AMENDMENTS

1. (Currently Amended) A method of suppressing noise in a signal containing noise to provide a noise suppressed signal in which an estimate is made of the noise and an estimate is made of speech together with some noise, wherein the estimate of speech together with some noise is estimated to have a noise level lower than the noise level in the signal containing noise.
2. (Original) A method according to claim 1 in which the signal comprises speech.
3. (Original) A method according to claim 1 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.
4. (Original) A method according to claim 3 in which the level of the noise provides an acceptable level of context information.
5. (Original) A method according to claim 1 in which the level of the noise is below the mask limit of the speech and so is not audible to a listener.
6. (Original) A method according to claim 1 in which the level of noise approaches the mask limit of the speech and so some noise context information is left in the signal.
7. (Original) A method of producing a gain coefficient for noise suppression in which a first estimation of the gain coefficient is made adaptively and this first estimation is used

to produce a noise estimation which is then used to produce a second estimation of the gain function.

8. (Currently Amended) A method according to claim 711 in which the estimated noise is power spectral density.

9. (Currently Amended) A method according to claim 711 in which the first estimation is used to update the estimated noise.

10. (New) A method according to claim 1 in which a noise reducing filter is generated.

a 11. (New) A method according to claim 10 in which during generation of the noise reducing filter, a reducing factor is applied to reduce the noise level of the estimate of speech together with some noise relative to the noise level in the signal containing noise.

12. (New) A method according to claim 10 in which the noise reducing filter is a Wiener filter.

13. (New) A method of noise suppression according to claim 1 in which a gain coefficient is produced in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

14. (New) A noise suppressor for suppressing noise in a signal containing noise to provide a noise suppressed signal comprising a noise estimator to make an estimate of the noise and a reduced noisy speech estimator to make an estimate of speech together with some noise, the estimate of speech together with some noise

estimated to have a noise level lower than the noise level in the signal containing noise.

15. (New) A noise suppressor according to claim 14 in which the signal comprises speech.

16. (New) A noise suppressor according to claim 14 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

17. (New) A noise suppressor according to claim 14 in which the level of the noise provides an acceptable level of context information.

a 18. (New) A noise suppressor according to claim 14 in which the level of the noise is below the mask limit of the speech and so is not audible to a listener.

19. (New) A noise suppressor according to claim 14 in which the level of noise approaches the mask limit of the speech and so some noise context information is left in the signal.

20. (New) A noise suppressor according to claim 14 comprising a noise reducing filter generator to generate a noise reducing filter.

21. (New) A noise suppressor according to claim 20 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with some noise relative to the noise level in the signal containing noise.

22. (New) A noise suppressor according to claim 20 in which the noise reducing filter is a Wiener filter.

23. (New) A noise suppressor according to claim 14 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

a 24. (New) A communications terminal comprising a noise suppressor for suppressing noise in a signal containing noise to provide a noise suppressed signal, the noise suppressor comprising a noise estimator to make an estimate of the noise and a reduced noisy speech estimator to make an estimate of speech together with some noise, the estimate of speech together with some noise estimated to have a noise level lower than the noise level in the signal containing noise.

25. (New) A communications terminal according to claim 24 which is mobile.

26. (New) A communications terminal according to claim 24 which is fixed.

27. (New) A communications terminal according to claim 24 in which the signal comprises speech.

28. (New) A communications terminal according to claim 24 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

29. (New) A communications terminal according to claim 24 in which the level of the noise provides an acceptable level of context information.

30. (New) A communications terminal according to claim 24 in which the level of the noise is below the mask limit of the speech and so is not audible to a listener.

31. (New) A communications terminal according to claim 24 in which the level of noise approaches the mask limit of the speech and so some noise context information is left in the signal.

a 32. (New) A communications terminal according to claim 24 comprising a noise reducing filter generator to generate a noise reducing filter.

33. (New) A communications terminal according to claim 32 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with some noise relative to the noise level in the signal containing noise.

34. (New) A communications terminal according to claim 32 in which the noise reducing filter is a Wiener filter.

35. (New) A communications terminal according to claim 24 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

36. (New) A communications network comprising a noise suppressor for suppressing noise in a signal containing noise to provide a noise suppressed signal, the noise suppressor comprising a noise estimator to make an estimate of the noise and a reduced noisy speech estimator to make an estimate of speech together with some noise, the estimate of speech together with some noise estimated to have a noise level lower than the noise level in the signal containing noise.
37. (New) A communications network according to claim 36 in which the signal comprises speech.
38. (New) A communications network according to claim 36 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.
39. (New) A communications network according to claim 36 in which the level of the noise provides an acceptable level of context information.
40. (New) A communications network according to claim 36 in which the level of the noise is below the mask limit of the speech and so is not audible to a listener.
41. (New) A communications network according to claim 36 in which the level of the noise approaches the mask limit of the speech and so some noise context information is left in the signal.

42. (New) A communications network according to claim 36 comprising a noise reducing filter generator to generate a noise reducing filter.

43. (New) A communications network according to claim 42 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with some noise relative to the noise level in the signal containing noise.

a 44. (New) A communications network according to claim 42 in which the noise reducing filter is a Wiener filter.

45. (New) A communications network according to claim 36 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.